



DDDDDDDD	TTTTTTTTTT	RRRRRRRR	TTTTTTTTTT	EEEEEEEEEE	SSSSSSSS	TTTTTTTTTT	
DDDDDDDD	TTTTTTTTTT	RRRRRRRR	TTTTTTTTTT	EEEEEEEEEE	SSSSSSSS	TTTTTTTTTT	
DD	TT	RR	TT	EE	SS	TT	
DD	TT	RR	TT	EE	SS	TT	
DD	TT	RR	TT	EE	SS	TT	
DD	TT	RR	TT	EE	SS	TT	
DD	TT	RRRRRRRR	TT	EEEEEEEE	SSSSSS	TT	
DD	TT	RRRRRRRR	TT	EEEEEEEE	SSSSSS	TT	
DD	TT	RR	TT	EE		TT	
DD	TT	RR	TT	EE		TT	
DD	TT	RR	TT	EE		TT	
DD	TT	RR	TT	EE		TT	
DD	TT	RR	TT	EE		TT	
DD	TT	RR	TT	EE		TT	
DDDDDDDD	TT	RR	TT	EEEEEEEEEE	SSSSSSSS	TT	....
DDDDDDDD	TT	RR	TT	EEEEEEEEEE	SSSSSSSS	TT	....

LL	IIIIII	SSSSSSSS
LL	IIIIII	SSSSSSSS
LL	II	SS
LL	II	SS
LL	II	SS
LL	II	SS
LL	II	
LL	II	SSSSSS
LL	II	SSSSSS
LL	II	
LL	II	SS
LL	II	SS
LL	II	SS
LL	II	SS
LLLLLLLLLL	IIIIII	SSSSSSSS
LLLLLLLLLL	IIIIII	SSSSSSSS



(2)	44	DECLARATIONS
(3)	67	TST\$CONN_DTR - CONNECT TEST
(4)	158	TST\$DATA_DTR - DATA TEST
(5)	344	TST\$DISC_DTR - DISCONNECT TEST
(6)	441	TST\$INTE_DTR - INTERRUPT TEST
(7)	570	TST\$MISC_DTR - MISCELLANEOUS TEST
(8)	619	TST\$BAD_DTR - INVALID TEST TYPE

```
0000 1 .TITLE TSTSDTRTEST - DTR TEST ROUTINES
0000 2 .IDENT 'V04-000'
0000 3
0000 4
0000 5 *****
0000 6
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0000 24
0000 25
0000 26 *****
0000 27
0000 28
0000 29 ++
0000 30 FACILITY: DTS/DTR DECNET TEST PACKAGE
0000 31
0000 32 ABSTRACT:
0000 33 THIS MODULE IMPLEMENTS THE CONNECT, DATA, DISCONNECT,
0000 34 INTERRUPT, AND MISCELLANEOUS TEST SEQUENCES FOR DTR.
0000 35
0000 36 ENVIRONMENT: DTR RUNS IN USER MODE AND REQUIRES NETWORK PRIVILEGE.
0000 37
0000 38 AUTHOR: JAMES A. KRYCKA, CREATION DATE: 11-AUG-77
0000 39
0000 40 MODIFICATIONS:
0000 41
0000 42 --
```



```

0000 44      .SBTTL  DECLARATIONS
0000 45
0000 46 :
0000 47 : INCLUDE FILES:
0000 48 :
0000 49      $DTSDEF
0000 50      CMDDEF      ; DEFINE COMMAND LANGUAGE SYMBOLS
0000 51      EFNDEF      ; DEFINE EFN'S AND FUNCTION CODES
0000 52      $MSGDEF     ; DEFINE MAILBOX MESSAGE ID CODES
0000 53      .IIF NE K_LIST_MEB, .LIST MEB ; DEFINED IN DTPREFIX.MAR
0000 54 :
0000 55 : MACROS:
0000 56 :
0000 57 :      NONE
0000 58 :
0000 59 : EQUATED SYMBOLS:
0000 60 :
0000 61 :      NONE
0000 62 :
0000 63 : OWN STORAGE:
0000 64 :
0000 65 :      NONE

```

```
0000 67 .SBTTL TST$CONN_DTR - CONNECT TEST
0000 68 .PSECT TST$CODE NOWRT
0000 69 RT:: ; SYMBOL FOR DEBUGGING PURPOSES
0000 70
0000 71 :++
0000 72 : FUNCTIONAL DESCRIPTION:
0000 73 :
0000 74 : NONE
0000 75 :
0000 76 : CALLING SEQUENCE:
0000 77 :
0000 78 : BSB/JSB TST$CONN_DTR
0000 79 :
0000 80 : INPUT PARAMETERS:
0000 81 :
0000 82 : R9 TEST SUBFUNCTION VALUE
0000 83 : R10 ADDRESS OF NCB USERDATA FIELD (COUNTED ASCII STRING)
0000 84 : R11 ADDRESS OF NCB DESCRIPTOR BLOCK
0000 85 :
0000 86 : IMPLICIT INPUTS:
0000 87 :
0000 88 : NONE
0000 89 :
0000 90 : OUTPUT PARAMETERS:
0000 91 :
0000 92 : R0 COMPLETION CODE
0000 93 : R1 ADDRESS OF TEST ID STRING
0000 94 : R2-R11 DESTROYED
0000 95 :
0000 96 : IMPLICIT OUTPUTS:
0000 97 :
0000 98 : NONE
0000 99 :
0000 100 : COMPLETION CODES:
0000 101 :
0000 102 : R0 1 = SUCCESS; 0 = FAILURE
0000 103 :
0000 104 : SIDE EFFECTS:
0000 105 :
0000 106 : NONE
0000 107 :
0000 108 : --
0000 109 :
0000 110 TST$CONN_DTR:: ; ENTRY POINT
05 59 91 0000 111 CMPB R9,#5 ;
0C 1B 0003 112 BLEQU 5$ ;
018A 30 0005 113 BSBW TST$CONN REJECT ; ISSUE CONNECT REJECT
50 01F58053 8F D0 0008 114 MOVL #DTS$ BADSUBFCN,R0 ; ; GIVE REASON FOR FAILURE
56 59 FF 8F 9C 000F 115 BRB CONN FAILURE ;
0011 116 5$: ROTL #-1,R9,R6 ;
0016 117 ;
0016 118 ;
0016 119 $CASEB SELECTOR=R6,DISPL=<-
0016 120 10$-
0016 121 20$-
0016 122 30$-
0016 123 > ;
; DIVIDE CONTEST FIELD BY 2 TO
; DETERMINE WHAT TYPE (IF ANY)
; OF USERDATA IS TO BE RETURNED.
; RETURN:
; NO USERDATA
; STANDARD DATA
; RECEIVED DATA
```



```

      6A 94 0020 124 10$: CLRB (R10) ; ZERO LENGTH OF USERDATA STRING
      09 11 0022 125 20$: BRB 30$ ; CONTINUE
      8A 10 90 0024 126 20$: MOVB #16,(R10)+ ; STORE 16 BYTES OF THE STANDARD
      0001'CF 10 28 0027 127 ; DATA PATTERN AS A COUNTED STRING
      0027 128 MOV C3 #16,W^TST$GT_STANDARD+1,(R10) ;
      002D 129 ;
      002D 130 ; RESPOND WITH CONNECT ACCEPT OR CONNECT REJECT AS APPROPRIATE.
      002D 131 ;
      002D 132 ;
      002D 133 ;
      52 02 D0 002D 134 30$: MOVL #EFN_K_CONN_REJE,R2 ; ASSUME CONNECT REJECT
      03 59 E9 0030 135 BLBC R9,40$ ; IS IT A REJECT REQUEST?
      52 01 D0 0033 136 40$: MOVL #EFN_K_CONN_ACCE,R2 ; NO, IT'S A CONNECT ACCEPT
      54 5B D0 0036 137 40$: MOVL R11,R4 ; P2 = ADDRESS OF NCB DESCRIPTOR BLOCK
      FFC4' 30 0039 138 BSBW TST$QIOW ; RESPOND TO CONNECT INITIATE
      25 59 E9 003C 139 BLBC R9,CONN_SUCCESS ; DID WE REJECT THE CONNECTION?
      003F 140 ; NO, WAIT FOR DISCONNECT FROM DTS
      52 00 D0 003F 141 MOVL #EFN_K_READ_MAIL,R2 ; GET FUNCTION/INDEX CODE
      54 00'8F 9A 0042 142 MOVZBL #TST$K_MAILBUF,R4 ; GET MAILBOX BUFFER SIZE
      FFB7' 30 0046 143 BSBW TST$QIOW ; READ MAILBOX
      FFB4' 30 0049 144 BSBW TST$EXAM_MAIL ; PARSE MAILBOX MESSAGE
      33 56 B1 004C 145 CMPW R6,#MSG$-DISCON ; WAS IT A SYNCHRONOUS DISCONNECT?
      13 13 004F 146 BEQLU CONN_SUCCESS ; YES, THAT'S OK
      30 56 B1 0051 147 CMPW R6,#MSG$-ABORT ; WAS IT A DISCONNECT ABORT?
      0E 13 0054 148 BEQLU CONN_SUCCESS ; YES, THAT'S OK TOO
      50 01F5803B 8F D0 0056 149 MOVL #DTS$-BADMAIL,R0 ; NOTE INVALID MAIL
      0000'CF 56 3C 005D 150 MOVZWL R6,W^TST$GL_FAOARG ; NOTE TYPE OF MAIL
      03 11 0062 151 BRB CONN_FAILURE ;
      0064 152 CONN_SUCCESS: ; TEST WAS SUCCESSFUL
      50 01 D0 0064 153 MOVL #1,R0 ; SET COMPLETION CODE TO SUCCESS
      0067 154 CONN_FAILURE: ; ENTER HERE IF TEST FAILED
      51 0000'CF 9E 0067 155 MOVAB W^TST$GT_CONN,R1 ; RETURN ADDRESS OF TEST ID STRING
      05 006C 156 RSB ; YES, EXIT
```



```
006D 158 .SBTTL TST$DATA_DTR - DATA TEST
000C006D 159 .PSECT TST$CODE NOWRT
006D 160
006D 161 :++
006D 162 : FUNCTIONAL DESCRIPTION:
006D 163 :
006D 164 : NONE
006D 165 :
006D 166 : CALLING SEQUENCE:
006D 167 :
006D 168 : BSB/JSB TST$DATA_DTR
006D 169 :
006D 170 : INPUT PARAMETERS:
006D 171 :
006D 172 : R9 TEST SUBFUNCTION VALUE
006D 173 : R10 ADDRESS OF NCB USERDATA FIELD (COUNTED ASCII STRING)
006D 174 : R11 ADDRESS OF NCB DESCRIPTOR BLOCK
006D 175 :
006D 176 : IMPLICIT INPUTS:
006D 177 :
006D 178 : NONE
006D 179 :
006D 180 : OUTPUT PARAMETERS:
006D 181 :
006D 182 : R0 COMPLETION CODE
006D 183 : R1 ADDRESS OF TEST ID STRING
006D 184 : R2-R11 DESTROYED
006D 185 :
006D 186 : IMPLICIT OUTPUTS:
006D 187 :
006D 188 : NONE
006D 189 :
006D 190 : COMPLETION CODES:
006D 191 :
006D 192 : R0 1 = SUCCESS; 0 = FAILURE
006D 193 :
006D 194 : SIDE EFFECTS:
006D 195 :
006D 196 : NONE
006D 197 :
006D 198 :--
006D 199
006D 200 TST$DATA_DTR::
006D 201 CMPB R9,#VAL_K_TYPE_ECHO : ENTRY POINT
0070 202 BLEQU 10$ :
0072 203 BSBW TST$CONN REJECT : ISSUE CONNECT REJECT
50 01F58053 8F D0 0075 204 MOVL #DTS$_BADSUBFCN,R0 : ; GIVE REASON FOR FAILURE
007C 205 BRB 55$ :
007E 206 10$: MOVAB 3(R10),R0 : SAVE REMAINING FIELDS IN MESSAGE
0082 207 CMPB (R0),#VAL_K_FLOW_MESS :
0085 208 BEQL 20$ :
0087 209 BSBW TST$CONN REJECT : ISSUE CONNECT REJECT
50 01F58063 8F D0 008A 210 MOVL #DTS$_INVOPTION,R0 : ; GIVE REASON FOR FAILURE
0091 211 BRB 55$ :
0093 212 20$: MOVAB (R0),#W^TST$GB_FLOW : STORE FCOPT VALUE
0098 213 CMPB (R0),#1 :
009B 214 BEQL 30$ :
```



```
50 01F58063 00F2 30 009D 215 BSBW TST$CONN_REJECT ; ISSUE CONNECT REJECT
      8F D0 00A0 216 MOVL #DTS$_INVOPTION,R0 ; GIVE REASON FOR FAILURE
      40 11 00A7 217 BRB 55$ ;
0000'CF 80 90 00A9 218 30$: MOV B (R0)+,W^TST$GB_RQUEUE ; STORE FCVAL VALUE
      60 95 00AE 219 TSTB (R0) ;
      0C 13 00B0 220 BEQL 40$ ;
      00DD 30 00B2 221 BSBW TST$CONN_REJECT ; ISSUE CONNECT REJECT
50 01F58063 8F D0 00B5 222 MOVL #DTS$_INVOPTION,R0 ; GIVE REASON FOR FAILURE
      2B 11 00BC 223 BRB 55$ ;
0000'CF 80 90 00BE 224 40$: MOV B (R0)+,W^TST$GB_NAK ; STORE NAK VALUE
      60 95 00C3 225 TSTB (R0) ;
      0C 13 00C5 226 BEQL 50$ ;
      00C8 30 00C7 227 BSBW TST$CONN_REJECT ; ISSUE CONNECT REJECT
50 01F58063 8F D0 00CA 228 MOVL #DTS$_INVOPTION,R0 ; GIVE REASON FOR FAILURE
      16 11 00D1 229 BRB 55$ ;
0000'CF 80 90 00D3 230 50$: MOV B (R0)+,W^TST$GB_BACK ; STORE BPVAL VALUE
1000 8F 60 B1 00D8 231 CMPW (R0),#MAX_K_SIZE_DA ;
      0D 15 00DD 232 BLEQ 60$ ;
      00B0 30 00DF 233 BSBW TST$CONN_REJECT ; ISSUE CONNECT REJECT
50 01F58063 8F D0 00E2 234 MOVL #DTS$_INVOPTION,R0 ; GIVE REASON FOR FAILURE
      009B 31 00E9 235 55$: DATA_FAILURE ;
0000'CF 80 B0 00EC 236 60$: MOVW (R0)+,W^TST$GW_SIZE ; STORE MSGLEN VALUE
      00F1 237 ;
      00F1 238 ;
      00F1 239 ; RESPOND TO CONNECT INITIATE WITH A CONNECT ACCEPT WITHOUT USERDATA.
      00F1 240 ;
      00F1 241 ;
0099 30 00F1 242 BSBW TST$CONN_ACCEPT ;
      00F4 243 ;
      00F4 244 ;
      00F4 245 ; DATA TEST INITIALIZATION
      00F4 246 ;
      00F4 247 ;
0000'CF 7C 00F4 248 CLRQ W^TST$GL_XMITDATA ; ZERO TRANSMIT AND RECEIVE
      00F8 249 CLRQ W^TST$GL_XMITINTE ; MESSAGE COUNTERS
0000'CF 7C 00F8 250 CLRQ W^TST$GL_XMITINTE ; ZERO TRANSMIT AND RECEIVE
      00FC 251 ; INTERRUPT MESSAGE COUNTERS
0000'CF 01 D0 00FC 252 MOVL #1,W^TST$GL_STATUS ; SET AST STATUS CODE TO SUCCESS
0000'CF 94 0101 253 CLRB W^TST$GB_ASTFLAGS ; NOTE TIMER RUNNING
00000000'EF 00000000'EF DE 0105 254 MOVAL TST$QB_QHEAD,TST$QB_QHEAD; INIT QUEUE HEAD
00000004'EF 00000000'EF DE 0110 255 MOVAL TST$QB_QHEAD,TST$QB_QHEAD+4
      011B 256 ;
      011B 257 ; PUT REPETITIONS OF THE STANDARD DATA PATTERN IN THE MESSAGE BUFFER
      011B 258 ; BEGINNING AT BUFFER+4.
      011B 259 ;
      011B 260 ;
53 0000'CF 9E 011B 261 MOVAB W^TST$GB_XMITBUF,R3 ; GET ADDRESS OF MESSAGE
      83 D4 0120 262 CLRL (R3)+ ; INITIALIZE MESSAGE SEQUENCE NUMBER
54 0000'CF 3C 0122 263 MOVZWL W^TST$GW_SIZE,R4 ; GET MESSAGE SIZE
      54 04 B1 0127 264 CMPW #4,R4 ; ANY DATA IN MSG?
      06 18 012A 265 BGEQ 70$ ; NO, SO WHY FILLBUFFER
      54 04 C2 012C 266 SUBL2 #4,R4 ; REDUCE SIZE ACCORDINGLY
      FECE' 30 012F 267 BSBW TST$STANDARD ; PUT STD DATA PATTERN IN BUFFER
      0132 268 ;
      0132 269 70$: ;
      0132 270 ;
      0132 271 ; RECEIVE [AND TRANSMIT] DATA MESSAGES UNTIL DTS DISCONNECTS THE LINK
```



```
0132 272 ;
0132 273 ;
54 52 07 D0 0132 274      MOVL      #EFN_K_RECV_DATA,R2      ; GET FUNCTION/INDEX CODE
0000'CF 3C 0135 275      MOVZWL   W^TST$GW_SIZE,R4          ; GET MESSAGE SIZE
55 0000'CF 9E 013A 276      MOVAB    W^TST$RECVAST_DTR,R5      ; GET ADDRESS OF AST ROUTINE
FEFE' 30 013F 277      BSBW      TST$QIOAST                ; START UP RECEIVE MESSAGE STREAM
52 00 00 D0 0142 278      MOVL      #EFN_K_READ_MAIL,R2      ; GET FUNCTION/INDEX CODE
54 00'8F 9A 0145 279      MOVZBL   #TST$K_MAILBUF,R4         ; GET MAILBOX BUFFER SIZE
55 0000'CF 9E 0149 280      MOVAB    W^TST$MAILAST_DTR,R5      ; GET ADDRESS OF AST ROUTINE
FEAF' 30 014E 281      BSBW      TST$QIOAST                ; START UP READ MAILBOX STREAM
0151 282 ;
0151 283 ;
0151 284 ; WAIT FOR LINK DISCONNECT
0151 285 ;
0151 286 ;
07 11 0151 287      BRB          110$                        ; CHECK FOR ASTS
0153 288 100$:
0153 289      $HIBER_S                                ; GO TO SLEEP TILL AN AST
015A 290 110$:
50 23 0000'CF E8 015A 291      BLBS     W^TST$GB_ASTFLAGS,120$    ; JUMP IF TIMER EXPIRED
00000000'FF OF 015F 292      REMQUE   @TST$QB_QHEAD,R0          ; DEQUEUE AN AST
EB 1D 0166 293      BVS          100$                        ; NOTHING THERE , SLEEP
52 0000'CO D0 0168 294      MOVL      TST$QB_CODE(R0),R2        ; QIO FUNCTION/CODE
54 0000'CO D0 016D 295      MOVL      TST$QB_BUFLN(R0),R4        ; SIZE FOR DATA MSG
55 0000'CO D0 0172 296      MOVL      TST$QB_ASTADR(R0),R5      ; AST ADDRESS FOR QIO
FE86' 30 0177 297      BSBW      TST$QIOAST                ; DO QIO WITH AST
DA 51 E8 017A 298      CHECK_SS
05 11 017D 299      BLBS     R1,110$                        ; MAKE SERVICE OKAY
0180 300      BRB          DATA_FAILURE                    ; IF OKAY BR
0182 301 120$:
0182 302 ;
0182 303 ; DATA TEST IS FINISHED
0182 304 ;
0182 305 ;
0182 306 ;
50 0000'CF D0 0182 307      MOVL      W^TST$GL_STATUS,R0        ; POST STATUS
0187 308 DATA_FAILURE:
51 0000'CF 9E 0187 309      MOVAB    W^TST$GT_DATA,R1          ; ENTER HERE IF TEST FAILED
05 018C 310      RSB
018D 311 ;
018D 312 ; SUBROUTINE TO ISSUE A CONNECT ACCEPT WITHOUT USERDATA.
018D 313 ;
018D 314 ;
018D 315 ;
018D 316 TST$CONN ACCEPT::
52 01 D0 018D 317      MOVL      #EFN_K_CONN_ACCE,R2          ; CONTROL POINT
03 11 0190 318      BRB          ACCEPT_REJECT              ; GET FUNCTION/INDEX CODE
0192 319 ; JOIN COMMON CODE
0192 320 ;
0192 321 ; SUBROUTINE TO ISSUE A CONNECT REJECT WITHOUT USERDATA.
0192 322 ;
0192 323 ;
0192 324 TST$CONN REJECT::
52 02 D0 0192 325      MOVL      #EFN_K_CONN_REJE,R2          ; CONTROL POINT
0195 326 ACCEPT_REJECT:
0195 327 ; GET FUNCTION/INDEX CODE
0195 328 ; CONTROL POINT
```



- DTR TEST ROUTINES  
TST\$DATA\_DTR - DATA TEST

16-SEP-1984 01:27:40 VAX/VMS Macro V04-00  
5-SEP-1984 00:22:20 [DTSDTR.SRC]DTRTEST.MAR;1

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(4)

				0195	329	:	AN ALTERNATE TO THE FOLLOWING TWO INSTRUCTIONS IS:	
				0195	330	:		
				0195	331	:	CLRB      (R10)	
				0195	332	:		
				0195	333	:	THE LONGER SEQUENCE BELOW IS USED TO CHECKOUT NETACP'S HANDLING	
				0195	334	:	OF NO USERDATA STRING PRESENT.	
				0195	335	:		
				0195	336	:		
	8A	22	90	0195	337	:	MOVB     #^A\''\",(R10)+	: TERMINATE NCB STRING BEFORE
				0198	338	:		COUNTED USERDATA STRING
6B	SA	04 AB	C3	0198	339	:	SUBL3    4(R11),R10,(R11)	: REDUCE SIZE IN NCB DESCRIPTOR
	54	5B,	D0	019D	340	:	MOVL     R11,R4	: P2 = ADDRESS OF NCB DESCRIPTOR BLOCK
		FE5D'	30	01A0	341	:	BSBW     TST\$QIOW	: ISSUE THE CONNECT REJECT
			05	01A3	342	:	RSB	: EXIT

```
000001A4 344 .SBTTL TST$DISC_DTR - DISCONNECT TEST
01A4 345 .PSECT TST$CODE- NOWRT
01A4 346
01A4 347 :++
01A4 348 : FUNCTIONAL DESCRIPTION:
01A4 349 :
01A4 350 : NONE
01A4 351 :
01A4 352 : CALLING SEQUENCE:
01A4 353 :
01A4 354 : BSB/JSB TST$DISC_DTR
01A4 355 :
01A4 356 : INPUT PARAMETERS:
01A4 357 :
01A4 358 : R9 TEST SUBFUNCTION VALUE
01A4 359 : R10 ADDRESS OF NCB USERDATA FIELD (COUNTED ASCII STRING)
01A4 360 : R11 ADDRESS OF NCB DESCRIPTOR BLOCK
01A4 361 :
01A4 362 : IMPLICIT INPUTS:
01A4 363 :
01A4 364 : NONE
01A4 365 :
01A4 366 : OUTPUT PARAMETERS:
01A4 367 :
01A4 368 : R0 COMPLETION CODE
01A4 369 : R1 ADDRESS OF TEST ID STRING
01A4 370 : R2-R11 DESTROYED
01A4 371 :
01A4 372 : IMPLICIT OUTPUTS:
01A4 373 :
01A4 374 : NONE
01A4 375 :
01A4 376 : COMPLETION CODES:
01A4 377 :
01A4 378 : R0 1 = SUCCESS; 0 = FAILURE
01A4 379 :
01A4 380 : SIDE EFFECTS:
01A4 381 :
01A4 382 : NONE
01A4 383 :
01A4 384 : --
01A4 385 :
01A4 386 TST$DISC_DTR:: : ENTRY POINT
05 59 91 01A4 387 CMPB R9,#5 :
FFD2 0C 1B 01A7 388 BLEQU 5$ :
50 01F58053 8F D0 01A9 389 BSBW TST$CONN_REJECT : ISSUE CONNECT REJECT
4B 11 01AC 390 MOVL #DTSS_BADSUBFCN,R0 : ; GIVE REASON FOR FAILURE
01B3 391 BRB DISC_FAILURE :
01B5 392 :
01B5 393 :
01B5 394 : RESPOND TO CONNECT INITIATE WITH A CONNECT ACCEPT WITHOUT USERDATA.
01B5 395 :
01B5 396 :
57 6A 90 01B5 397 5$: MOVB (R10),R7 : SAVE USERDATA STRING COUNT
FFD2 30 01B8 398 BSBW TST$CONN_ACCEPT :
5A D7 01BB 399 DECL R10 : RESTORE POINTER
6A 57 90 01BD 400 MOVB R7,(R10) : RESTORE USERDATA STRING COUNT
```



```
01C0 401
01C0 402 :
01C0 403 : CONTINUE SET-UP FOR DISCONNECT OF LINK JUST ESTABLISHED.
01C0 404 :
01C0 405 :
56 54 0000'CF 7E 01C0 406 MOVAQ W^TST$GQ_DEACCESS,R4 : P2 = ADDR OF USERDATA DESC BLOCK
59 FF 8F 9C 01C5 407 ROTL #-1,R9,R6 : DIVIDE DISTEST FIELD BY 2 TO
01CA 408 : DETERMINE WHAT TYPE (IF ANY)
01CA 409 : OF USERDATA IS TO BE RETURNED.
01CA 410 SCASEB SELECTOR=R6,DISPL=<- : RETURN:
01CA 411 10$- : NO USERDATA
01CA 412 20$- : STANDARD DATA
01CA 413 30$- : RECEIVED DATA
01CA 414 > :
54 D4 01D4 415 10$: CLRL R4 : P2 = 0; SPECIFY NO USERDATA
19 11 01D6 416 BRB 40$ : CONTINUE
64 11 D0 01D8 417 20$: MOVL #<1+16>,(R4) : SPECIFY SIZE OF USERDATA
01DB 418 : COUNTED STRING
0000'CF 10 90 01DB 419 MOVB #16,W^TST$GT_STANDARD : MODIFY COUNT
04 A4 0000'CF 9E 01E0 420 MOVAB W^TST$GT_STANDARD,4(R4) : SPECIFY ADDRESS OF COUNTED STRING
09 11 01E6 421 BRB 40$ : CONTINUE
64 6A 9A 01E8 422 30$: MOVZBL (R10),(R4) : SPECIFY SIZE OF RECEIVED DATA
64 D6 01EB 423 INCL (R4) : COUNTED STRING
04 A4 5A D0 01ED 424 MOVL R10,4(R4) : SPECIFY ADDRESS OF COUNTED STRING
01F1 425 :
01F1 426 :
01F1 427 : DETERMINE WHETHER TO RESPOND WITH A SYNCHRONOUS DISCONNECT OR A
01F1 428 : DISCONNECT ABORT.
01F1 429 :
01F1 430 :
52 03 D0 01F1 431 40$: MOVL #EFN_K_DISC_SYNC,R2 : ASSUME SYNCHRONOUS DISCONNECT
03 59 E9 01F4 432 BLBC R9,50$- : IS IT A SYNC DISCONNECT REQUEST?
52 04 D0 01F7 433 MOVL #EFN_K_DISC_ABRT,R2 : NO IT'S A DISCONNECT ABORT
FE03' 30 01FA 434 50$: BSBW TST$QIDW : DISCONNECT THE LINK
01FD 435 DISC_SUCCESS: : TEST WAS SUCCESSFUL
50 01 D0 01FD 436 MOVL #1,R0 : SET COMPLETION CODE TO SUCCESS
0200 437 DISC_FAILURE: : ENTER HERE IF TEST FAILED
51 0000'CF 9E 0200 438 MOVAB W^TST$GT_DISC,R1 : RETURN ADDRESS OF TEST ID STRING
05 0205 439 RSB : EXIT
```

```
00000206 441 .SBTTL TST$INTE_DTR - INTERRUPT TEST
0206 442 .PSECT TST$CODE NOWRT
0206 443
0206 444 :++
0206 445 : FUNCTIONAL DESCRIPTION:
0206 446 :
0206 447 : NONE
0206 448 :
0206 449 : CALLING SEQUENCE:
0206 450 :
0206 451 : BSB/JSB TST$INTE_DTR
0206 452 :
0206 453 : INPUT PARAMETERS:
0206 454 :
0206 455 : R9 TEST SUBFUNCTION VALUE
0206 456 : R10 ADDRESS OF NCB USERDATA FIELD (COUNTED ASCII STRING)
0206 457 : R11 ADDRESS OF NCB DESCRIPTOR BLOCK
0206 458 :
0206 459 : IMPLICIT INPUTS:
0206 460 :
0206 461 : NONE
0206 462 :
0206 463 : OUTPUT PARAMETERS:
0206 464 :
0206 465 : R0 COMPLETION CODE
0206 466 : R1 ADDRESS OF TEST ID STRING
0206 467 : R2-R11 DESTROYED
0206 468 :
0206 469 : IMPLICIT OUTPUTS:
0206 470 :
0206 471 : NONE
0206 472 :
0206 473 : COMPLETION CODES:
0206 474 :
0206 475 : R0 1 = SUCCESS; 0 = FAILURE
0206 476 :
0206 477 : SIDE EFFECTS:
0206 478 :
0206 479 : NONE
0206 480 :
0206 481 : --
0206 482 :
0206 483 TST$INTE_DTR::
0206 484 CMPB R9,#VAL_K_TYPE_ECHO : ENTRY POINT
0209 485 BLEQU 10$ :
020B 486 BSBW TST$CONN_REJECT : ISSUE CONNECT REJECT
020E 487 MOVL #DTSS_BADSUBFCN,R0 : GIVE REASON FOR FAILURE
0215 488 BRB 15$ : INTERRUPT FAILURE
0217 489 10$: CMPB 3(R10),#1 :
021B 490 BEQL 20$ :
021D 491 BSBW TST$CONN_REJECT : ISSUE CONNECT REJECT
0220 492 MOVL #DTSS_INVOPTION,R0 : GIVE REASON FOR FAILURE
0227 493 15$: BRW INTE_FAILURE :
022A 494 20$: MOVW 3(R10),W^TST$GB_RQUEUE : STORE FCVAL VALUE
0230 495 #MAX_K_SIZE_IN,= : STORE INTERRUPT MESSAGE SIZE
0232 496 W^TST$GW_SIZE : SINCE THE TEST REQUEST DOES NOT
0235 497 : SPECIFY A SIZE, MAKE IT THE
```

```
03 59 91 0206 484
OC 1B 0209 485
FF84 30 020B 486
50 01F58053 8F D0 020E 487
10 11 0215 488
01 03 AA 91 0217 489
OD 13 021B 490
FF72 30 021D 491
50 01F58063 8F D0 0220 492
0091 31 0227 493
0000'CF 03 AA 90 022A 494
10 B0 0230 495
0000'CF 0232 496
0235 497
```



```
                                0235 498                                ; MAXIMUM SIZE
                                0235 499
                                0235 500
                                0235 501 : RESPOND TO CONNECT INITIATE WITH A CONNECT ACCEPT WITHOUT USERDATA.
                                0235 502 :
                                0235 503
                                FF55 30 0235 504 BSBW TST$CONN_ACCEPT ;
                                0238 505
                                0238 506 : INTERRUPT TEST INITIALIZATION
                                0238 507 :
                                0238 508 :
                                0238 509
                                0000'CF 7C 0238 510 CLRQ W^TST$GL_XMITDATA ; ZERO TRANSMIT AND RECEIVE
                                023C 511 : MESSAGE COUNTERS
                                0000'CF 7C 023C 512 CLRQ W^TST$GL_XMITINTE ; ZERO TRANSMIT AND RECEIVE
                                0000'CF 01 D0 0240 513 MOVL #1,W^TST$GL_STATUS ; SET AST STATUS CODE TO SUCCESS
                                0245 514 : INTERRUPT MESSAGE COUNTERS
                                0000'CF 94 0245 515 CLRB W^TST$GB_ASTFLAGS ; NOTE TIMER RUNNING
                                00000000'EF 00000000'EF DE 0249 516 MOVAL TST$QB_QHEAD,TST$QB_QHEAD;INIT QUEUE HEAD
                                00000004'EF 00000000'EF DE 0254 517 MOVAL TST$QB_QHEAD,TST$QB_QHEAD+4
                                025F 518 :
                                025F 519 : PUT REPETITIONS OF THE STANDARD DATA PATTERN IN THE INTERRUPT MESSAGE BUFFER
                                025F 520 : BEGINNING AT BUFFER+4.
                                025F 521 :
                                025F 522
                                53 0000'CF 9E 025F 523 MOVAB W^TST$GB_INTEBUF,R3 ; GET ADDRESS OF MESSAGE
                                83 D4 0264 524 CLRL (R3)+ ; INITIALIZE MESSAGE SEQUENCE NUMBER
                                54 0000'CF 3C 0266 525 MOVZWL W^TST$GW_SIZE,R4 ; GET MESSAGE SIZE
                                54 04 B1 026B 526 CMPW #4,R4 ; ANY DATA IN MSG?
                                06 18 026E 527 BGEQ 30$ ; NOPE DONT FILL BUFFER
                                54 04 C2 0270 528 SUBL2 #4,R4 ; REDUCE SIZE ACCORDINGLY
                                FD8A' 30 0273 529 BSBW TST$STANDARD ; PUT STD DATA PATTERN IN BUFFER
                                0276 530
                                0276 531 30$:
                                0276 532 :
                                0276 533 : RECEIVE [AND TRANSMIT] INTERRUPT MESSAGES UNTIL DTS DISCONNECTS THE LINK
                                0276 534 :
                                0276 535
                                52 00 D0 0276 536 MOVL #EFN K_READ_MAIL,R2 ; GET FUNCTION/INDEX CODE
                                54 00'8F 9A 0279 537 MOVZBL #TST$K_MAILBUF,R4 ; GET MAILBOX BUFFER SIZE
                                55 0000'CF 9E 027D 538 MOVAB W^TST$MAILAST_DTR,R5 ; GET ADDRESS OF AST ROUTINE
                                FD7B' 30 0282 539 BSBW TST$QIOAST ; START UP READ MAILBOX STREAM
                                0285 540
                                0285 541 :
                                0285 542 : WAIT FOR LINK DISCONNECT
                                0285 543 :
                                0285 544
                                07 11 0285 545 BRB 110$ ;CHECK FOR ASTS
                                0287 546 100$:
                                0287 547 $HIBER_S ;GO TO SLEEP TILL AN AST
                                028E 548 110$:
                                50 23 0000'CF E8 028E 549 BLBS W^TST$GB_ASTFLAGS,120$ ;JUMP IF TIMER EXPIRED
                                00000000'FF 0F 0293 550 REMQUE @TST$QB_QHEAD,R0 ;DEQUEUE AN AST
                                EB 1D 029A 551 BVS 100$ ;NOTHING THERE ,SLEEP
                                52 0000'CO D0 029C 552 MOVL TST$QB_CODE(R0),R2 ;QIO FUNCTION/CODE
                                54 0000'CO D0 02A1 553 MOVL TST$QB_BUFLN(R0),R4 ;SIZE FOR DATA MSG
                                55 0000'CO D0 02A6 554 MOVL TST$QB_ASTADR(R0),R5 ;AST ADDRESS FOR QIO
```

```
FD52' 30 02AB 555 BSBW TST$QIOAST ;DO QIO WITH AST
          02AE 556 CHECK_SS ;MAKE SERVICE OKAY
07 51 E9 02B1 557 BLBC R1,INTE_FAILURE ;LINK ABORTED
D8 11 02B4 558 BRB 110$ ;DEQUEUE ANOTHER
          02B6 559 120$:
          02B6 560
          02B6 561 ;
          02B6 562 ; INTERRUPT TEST IS FINISHED
          02B6 563 ;
          02B6 564
50 0000'CF D0 02B6 565 MOVL W^TST$GL_STATUS,R0 ; POST STATUS
          02BB 566 INTE_FAILURE: ; ENTER HERE IF TEST FAILED
51 0000'CF 9E 02BB 567 MOVAB W^TST$GT_INTE,R1 ; RETURN ADDRESS OF TEST ID STRING
          05 02C0 568 RSB ; EXIT
```



```
000002C1 570      .SBTTL  TST$MISC_DTR - MISCELLANEOUS TEST
02C1 571      .PSECT  TST$CODE-      NOWRT
02C1 572
02C1 573      :++
02C1 574      : FUNCTIONAL DESCRIPTION:
02C1 575      :
02C1 576      :     NONE
02C1 577
02C1 578      : CALLING SEQUENCE:
02C1 579      :
02C1 580      :     BSB/JSB TST$MISC_DTR
02C1 581
02C1 582      : INPUT PARAMETERS:
02C1 583      :
02C1 584      :     R9      TEST SUBFUNCTION VALUE
02C1 585      :     R10     ADDRESS OF NCB USERDATA FIELD (COUNTED ASCII STRING)
02C1 586      :     R11     ADDRESS OF NCB DESCRIPTOR BLOCK
02C1 587
02C1 588      : IMPLICIT INPUTS:
02C1 589      :
02C1 590      :     NONE
02C1 591
02C1 592      : OUTPUT PARAMETERS:
02C1 593      :
02C1 594      :     R0      COMPLETION CODE
02C1 595      :     R1      ADDRESS OF TEST ID STRING
02C1 596      :     R2-R11  DESTROYED
02C1 597
02C1 598      : IMPLICIT OUTPUTS:
02C1 599      :
02C1 600      :     NONE
02C1 601
02C1 602      : COMPLETION CODES:
02C1 603      :
02C1 604      :     RC      1 = SUCCESS; 0 = FAILURE
02C1 605
02C1 606      : SIDE EFFECTS:
02C1 607      :
02C1 608      :     NONE
02C1 609
02C1 610      : --
02C1 611
02C1 612 TST$MISC_DTR::
02C1 613 MISC_SUCCESS:
02C1 614      MOVL    #1,R0
02C4 615 MISC_FAILURE:
02C4 616      MOVAB   W^TST$GT_MISC,R1
05 02C9 617      RSB
                                : ENTRY POINT
                                : TEST WAS SUCCESSFUL
                                : SET COMPLETION CODE TO SUCCESS
                                : ENTER HERE IF TEST FAILED
                                : RETURN ADDRESS OF TEST ID STRING
                                : EXIT
```

50 01 D0

51 0000'CF 9E

```
000002CA 619      .SBTTL TST$BAD_DTR - INVALID TEST TYPE
02CA 620      .PSECT TST$CODE      NOWRT
02CA 621
02CA 622      :++
02CA 623      : FUNCTIONAL DESCRIPTION:
02CA 624      :
02CA 625      :     NONE
02CA 626      :
02CA 627      : CALLING SEQUENCE:
02CA 628      :
02CA 629      :     BSB/JSB TST$BAD_DTR
02CA 630      :
02CA 631      : INPUT PARAMETERS:
02CA 632      :
02CA 633      :     R9      TEST SUBFUNCTION VALUE
02CA 634      :     R10     ADDRESS OF NCB USERDATA FIELD (COUNTED ASCII STRING)
02CA 635      :     R11     ADDRESS OF NCB DESCRIPTOR BLOCK
02CA 636      :
02CA 637      : IMPLICIT INPUTS:
02CA 638      :
02CA 639      :     NONE
02CA 640      :
02CA 641      : OUTPUT PARAMETERS:
02CA 642      :
02CA 643      :     R0      COMPLETION CODE
02CA 644      :     R1      ADDRESS OF TEST ID STRING
02CA 645      :     R2-R11  DESTROYED
02CA 646      :
02CA 647      : IMPLICIT OUTPUTS:
02CA 648      :
02CA 649      :     NONE
02CA 650      :
02CA 651      : COMPLETION CODES:
02CA 652      :
02CA 653      :     R0      8 = FAILURE
02CA 654      :
02CA 655      : SIDE EFFECTS:
02CA 656      :
02CA 657      :     NONE
02CA 658      :
02CA 659      : --
02CA 660
02CA 661 TST$BAD_DTR::
02CA 662      BSBW      TST$CONN REJECT      ; ENTRY POINT
02CD 663      MOVL     #DTSS_BADFUNC,R0    ; ISSUE CONNECT REJECT
02D4 664      MOVAB    W^TST$GT_ERROR,R1   ; GIVE REASON FOR FAILURE
02D9 665      RSB      ; RETURN ADDRESS OF TEST ID STRING
02DA 666      .END      ; EXIT
```

50      FEC5      30  
01F5805B 8F      D0  
51      0000'CF      9E  
                 05



TSTSDTRTEST  
Symbol table

- DTR TEST ROUTINES

L 2

16-SEP-1984 01:27:40  
5-SEP-1984 00:22:20

VAX/VMS Macro V04-00  
[DTS DTR.SRC]DTRTEST.MAR;1

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```

$$COUNT      = 00000003
ACCEPT_REJECT  = 00000195 R    02
CONN_FAILURE   = 00000067 R    02
CONN_SUCCESS   = 00000064 R    02
DATA_FAILURE   = 00000187 R    02
DISC_FAILURE   = 00000200 R    02
DISC_SUCCESS   = 000001FD R    02
DTSS_BADFUNC   = 01F5805B
DTSS_BADMAIL   = 01F5803B
DTSS_BADSUBFCN = 01F58053
DTSS_INVOPTION = 01F58063
EFN_R_CONN_ACCE= 00000001
EFN_K_CONN_REJE= 00000002
EFN_K_DISC_ABRT= 00000004
EFN_K_DISC_SYNC= 00000003
EFN_K_READ_MAIL= 00000000
EFN_K_RECV_DATA= 00000007
INTE_FAILURE   = 000002BB R    02
K_LIST_MEB     = 00000000
MAX_K_SIZE_DA  = 00001000
MAX_K_SIZE_IN  = 00000010
MISC_FAILURE   = 000002C4 R    02
MISC_SUCCESS   = 000002C1 R    02
MSG$_ABORT     = 00000030
MSG$_DISCON    = 00000033
RT             = 00000000 RG   02
SYSSHIBER      = ***** GX  02
TST$BAD_DTR    = 000002CA RG   02
TST$CHECK_SS   = ***** X   02
TST$CONN_ACCEPT= 0000018D RG   02
TST$CONN_DTR   = 00000000 RG   02
TST$CONN_REJECT= 00000192 RG   02
TST$DATA_DTR   = 0000006D RG   02
TST$DISC_DTR   = 000001A4 RG   02
TST$EXAM_MAIL  = ***** X   02
TST$GB_ASTFLAGS= ***** X   02
TST$GB_BACK    = ***** X   02
TST$GB_FLOW    = ***** X   02
TST$GB_INTEBUF = ***** X   02
TST$GB_NAK     = ***** X   02
TST$GB_RQUEUE  = ***** X   02
TST$GB_XMITBUF = ***** X   02
TST$GL_FAOARG  = ***** X   02
TST$GL_STATUS  = ***** X   02
TST$GL_XMITDATA= ***** X   02
TST$GL_XMITINTE= ***** X   02
TST$GQ_DEACCESS= ***** X   02
TST$GT_CONN    = ***** X   02
TST$GT_DATA    = ***** X   02
TST$GT_DISC    = ***** X   02
TST$GT_ERROR   = ***** X   02
TST$GT_INTE    = ***** X   02
TST$GT_MISC    = ***** X   02
TST$GT_STANDARD= ***** X   02
TST$GW_SIZE    = ***** X   02
TST$INTE_DTR   = 00000206 RG   02
TST$K_MAILBUF  = ***** X   02

```

```

TST$MAILAST_DTR ***** X   02
TST$MISC_DTR   = 000002C1 RG  02
TST$QB_ASTADR  ***** X   02
TST$QB_BUFLN   ***** X   02
TST$QB_CODE    ***** X   02
TST$QB_QHEAD   ***** X   02
TST$QIDAST     ***** X   02
TST$QIOW       ***** X   02
TST$RECVAST_DTR ***** X   02
TST$STANDARD   ***** X   02
VAL_K_BACK_NO  = 00000000
VAL_K_DISP_NO  = 00000000
VAL_K_FLOW_MESS= 00000002
VAL_K_NAK_NO   = 00000000
VAL_K_PRIN_NO  = 00000000
VAL_K_RETU_NO  = 00000000
VAL_K_STAT_YES = 00000001
VAL_K_TYPE_ABRT= 00000001
VAL_K_TYPE_ACCE= 00000001
VAL_K_TYPE_ECHO= 00000003
VAL_K_TYPE_NAME= 00000000
VAL_K_TYPE_SINK= 00000000

```



+-----+  
! Psect synopsis !  
+-----+

PSECT name	Allocation	PSECT No.	Attributes
ABS	00000000 ( 0.)	00 ( 0.)	NOPIC USR
\$ABSS	00000000 ( 0.)	01 ( 1.)	NOPIC USR
TST\$CODE	000002DA ( 730.)	02 ( 2.)	NOPIC USR

	CON	ABS	LCL	NOSHR	NOEXE	NORD	NOWRT	NOVEC	BYTE
	CON	ABS	LCL	NOSHR	EXE	RD	WRT	NOVEC	BYTE
	CON	REL	LCL	NOSHR	EXE	RD	NOWRT	NOVEC	BYTE

+-----+  
! Performance indicators !  
+-----+

Phase	Page faults	CPU Time	Elapsed Time
Initialization	36	00:00:00.08	00:00:00.78
Command processing	133	00:00:00.67	00:00:03.18
Pass 1	207	00:00:05.17	00:00:13.99
Symbol table sort	0	00:00:00.23	00:00:00.33
Pass 2	122	00:00:01.89	00:00:05.10
Symbol table output	8	00:00:00.07	00:00:00.10
Psect synopsis output	2	00:00:00.03	00:00:00.10
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	510	00:00:08.14	00:00:23.59

The working set limit was 1350 pages.  
25405 bytes (50 pages) of virtual memory were used to buffer the intermediate code.  
There were 20 pages of symbol table space allocated to hold 208 non-local and 31 local symbols.  
728 source lines were read in Pass 1, producing 18 object records in Pass 2.  
22 pages of virtual memory were used to define 18 macros.

+-----+  
! Macro library statistics !  
+-----+

Macro library name	Macros defined
_\$255\$DUA28:[DTS DTR.OBJ]DTS DTR.MLB;1	6
-\$255\$DUA28:[SYSLIB]STARLET.MLB;2	6
TOTALS (all libraries)	12

289 GETS were required to define 12 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LISS:DTRTEST/OBJ=OBJ\$:DTRTEST MSRC\$:DTPREFIX/UPDATE=(ENH\$:DTPREFIX)+MSRC\$:DTRTEST/UPDATE=(ENH\$:DTRTEST)



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